Title

Process for the synthesis of cationic lipids

Abstract

A process for the synthesis of lipid cations having general formula (6):

$$\begin{array}{c|c}
O & R_1 \\
O & R_1
\end{array}$$

$$\begin{array}{c|c}
O & R_1
\end{array}$$

$$\begin{array}{c|c}
R_2 \\
R_3 & X^{\oplus}
\end{array}$$
(6)

in which: R_1 represents a lipophilic chain; R_2 , R_3 , R_4 , which are identical or different from one another, represent C_1 - C_{10} alkyl, C_1 - C_{10} alkenyl, or C_1 - C_{10} alkynyl radicals, optionally containing hydroxyl, ether, halogen and acyloxy functions, and X is an oxy-anion or a halide; in which a compound of formula (2),

$$OR_5$$
 OR_6
 OTs
 (2)

in which R_5 and R_6 , which are identical or different from one another, represent a C_1 - C_5 acyl, a benzyl group or a diolprotective group, is reacted in an alcoholic solvent with from 1 to 6 equivalents of $NR_2R_3R_4$.